What is claimed is:

1   1.   A method comprising:

2   establishing a serial physical link; and

3   providing isochronous support by a software

4   control on the serial physical link.

1   2.   The method of claim 1 further including providing

2   synchronous support by a software control on the serial

3   physical link.

1   3.   The method of claim 1 further including providing

2   asynchronous support by a software control on the serial

3   physical link.

1   4.   The method of claim 1 further including providing

2   separate logical and physical layers.

1   5.   The method of claim 4 including providing a

2   multiplexer in the physical layer coupled to the logical

3   layer.

1   6.   The method of claim 5 including coupling a

2   baseband processor to said physical layer.

1   7.   The method of claim 5 including coupling an

2   applications processor to said physical layer.

13

1   8.   The method of claim 1 including providing a
2 plurality of different channel mapping schemes and enabling
3 the selection of one of said schemes.

1   9.   The method of claim 8 including providing a
2 channel mapping scheme in which each of a plurality of
3 classes has its own channel and multiplexing logical
4 channels with the same priority in round robin fashion.

1   10.   The method of claim 8 including dynamically
2 assigning channels on a first come, first served basis.

1   11.   The method of claim 8 including assigning a
2 plurality of channels to conversational service and
3 providing a plurality of multiplexed channels for other
4 services.

1   12.   An article comprising a medium storing
2 instructions that enable a processor-based system to:
3   establish a serial physical link; and
4   provide isochronous support by a software control
5 on the serial physical link.

1   13.   The article of claim 12 further storing
2 instructions that enable a processor-based system to

3   provide synchronous support by a software control on the

4   serial physical link.

1   14.   The article of claim 12 further storing

2   instructions that enable a processor-based system to

3   provide a plurality of different channel mapping schemes

4   and enable the selection of one of said schemes.

1   15.   The article of claim 14 further storing

2   instructions that enable a processor-based system to

3   provide a channel mapping scheme in which each of a

4   plurality of classes has its own channel and multiplex

5   logical channels with the same priority in round robin

6   fashion.

1   16.   The article of claim 14 further storing

2   instructions that enable a processor-based system to

3   dynamically assign channels on a first come, first served

4   basis.

1   17.   The article of claim 14 further storing

2   instructions that enable a processor-based system to assign

3   a plurality of channels to conversational service and

4   provide a plurality of multiplexed channels for other

5   services.

1   18.   An apparatus comprising:

2   a serial physical link that provides isochronous

3   support by a software control on the serial physical link;

4   and

5   a logical layer control to interface with said

6   physical link.

1   19.   The apparatus of claim 18 wherein said link

2   provides asynchronous support by a software control on the

3   serial physical link.

1   20.   The apparatus claim 19 wherein said link provides

2   synchronous support by a software control on the serial

3   physical link.

1   21.   The apparatus of claim 19 wherein said physical

2   layer control is coupled to said logical layer control.

1   22.   The apparatus of claim 21 wherein said physical

2   layer control includes a multiplexer coupled to the logical

3   layer control.

1   23.   The apparatus of claim 22 including a baseband

2   processor coupled to said physical layer control.

1   24.   The apparatus of claim 22 including an
2   applications processor coupled to said physical layer
3   control.

1   25.   The apparatus of claim 19 including a control to
2   provide a plurality of different channel mapping schemes
3   and enable the selection of one of said schemes.

1   26.   The apparatus of claim 25 including a control to
2   provide a channel mapping scheme in which each of a
3   plurality of classes has its own channel and to multiplex
4   logical channels with the same priority in round robin
5   fashion.

1   27.   The apparatus of claim 25 including a control to
2   dynamically assign channels on a first come, first served
3   basis.

1   28.   The apparatus of claim 25 including a control to
2   assign a plurality of channels to conversational service
3   and to provide a plurality of multiplexed channels for
4   other services.
1